

Abstract

A water supply apparatus includes an apparatus body (6) disposed in a flow passage (14) for sucking water to an indoor facility and a power generation unit (23) installed in the apparatus body. Further, the power generation unit further comprises a rotating shaft (34) extended in a direction perpendicular to the water channel direction of the flow passage, an impeller (27) installed on the rotating shaft and rotated by a water flow, a magnet (43) rotated interlockingly with the impeller, and a coil (29) arranged oppositely to the magnet, wherein the impeller forms blades (38) in the radial outer direction and forms clearances (40) allowing water to pass to the inside of the blades. Since the clearances (40) are formed between the blades (38) and the rotating shaft (34), such a trouble that water flowing into the base ends of the blades obstructs the rotation of the impeller can be eliminated to increase a power generation amount by the power generation unit. In addition, since there is no need to expand the flow passage on the outside of the impeller to reduce the rotational resistance of the impeller, the size of the water supply apparatus can be reduced.